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DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS

PATENT

Docket No. : 36936/NJP/E600

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LARGE DYNAMIC RANGE PROGRAMMABLE GAIN ATTENUATOR, the specification of which is attached hereto unless the following is checked:

☐ was filed on      as United States Application Number or PCT International Application Number      and was amended on      (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of the foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Application Number Country

Filing Date (day/month/year) Priority Claimed

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

Application Number Filing Date

60/164,981

November 11, 1999

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

Application Number Filing Date

Patented/Pending/Abandoned

POWER OF ATTORNEY: I hereby appoint the following attorneys and agents of the law firm CHRISTIE, PARKER & HALE, LLP to prosecute this application and any international application under the Patent Cooperation Treaty based on it and to transact all business in the U.S. Patent and Trademark Office connected with either of them in accordance with instructions from the assignee of the entire interest in this application:

**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS**

**Docket No. 36936/NJP/B600**

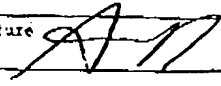
or from the first or sole inventor named below in the event the application is not assigned; or from \_\_\_ in the event the power granted herein is for an application filed on behalf of a foreign attorney or agent.

R. W. Johnston	(17,968)	Gregory S. Lampert	(35,581)	Cynthia A. Bonner	(44,548)
D. Bruce Prout	(20,958)	Grant T. Langton	(39,739)	Jun-Young E. Jeon	(43,693)
Hayden A. Carney	(22,653)	Constantine Marantidis	(39,759)	Marc A. Karish	(44,516)
Richard J. Ward, Jr.	(24,187)	Daniel R. Kimbell	(34,849)	John F. O'Rourke	(38,985)
Russell R. Palmer, Jr.	(22,994)	Craig A. Gelfound	(41,032)	Richard J. Paciulan	(28,245)
LeRoy T. Rahn	(20,356)	Syed A. Hasan	(41,057)	Josephine E. Chang	(46,033)
Richard D. Seibel	(22,134)	Kathleen M. Olster	(42,052)	Frank L. Cire	(42,419)
Walter C. Maxwell	(25,365)	Daniel M. Cavanagh	(41,661)	Harold E. Wurst	(22,153)
William P. Christie	(29,371)	Molly A. Holman	(40,022)	Robert A. Green	(28,301)
David A. Dillard	(30,631)	Lucinda G. Auciello	(42,270)	Derrick W. Reed	(40,135)
Thomas J. Daly	(32,213)	Norman E. Carte	(30,455)	John W. Peck	(44,284)
Vincent G. Gioia	(19,959)	Joel A. Kzuth	(41,886)	Stephen D. Burbach	(40,235)
Edward R. Schwartz	(31,135)	Patrick Y. Ikehara	(42,681)	David B. Sandelands, Jr.	(46,023)
John D. Carpenter	(54,133)	Mark Garscia	(31,953)	Heidi L. Eisenhut	(46,812)
David A. Plumley	(37,208)	Gary J. Nelson	(44,257)	Nicholas J. Pauley	(44,999)
Wesley W. Monroe	(39,775)	Raymond R. Tabandeh	(43,945)	Mark J. Marcelli	(36,593)

The authority under this Power of Attorney of each person named above shall automatically terminate and be revoked upon such person ceasing to be a member or associate of or of counsel to that law firm.

**DIRECT TELEPHONE CALLS TO :** Nicholas J. Pauley, 626/795-9900  
**SEND CORRESPONDENCE TO :** CHRISTIE, PARKER & HALE, LLP  
P.O. Box 7066, Pasadena, CA 91109-7066

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first joint inventor Arya Reza Behzad	Inventor's signature 	Date 11/13/00
Residence and Post Office Address Danville, California 94506		Citizenship USA

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## Supplemental Declaration for Patent Application

Docket Number: 1875.0980001

As a below named inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter that is claimed and for which a patent is sought on the invention entitled: Large Dynamic Range Programmable Gain Attenuator

the specification of which is attached hereto unless the following box is checked:

☒ was filed on November 13, 2000;  
as United States Application Number or PCT International Application Number 09/712,410; and  
is amended herewith.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information that became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or (f), or § 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or § 365(a) of any PCT international application, which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Priority Claimed

(Application No.)

(Country)

(Day/Month/Year Filed)

☐ Yes ☐ No

(Application No.)

(Country)

(Day/Month/Year Filed)

☐ Yes ☐ No

Send Correspondence to:

Sterne, Kessler, Goldstein & Fox p.l.l.c.  
1100 New York Avenue, N.W.  
Suite 600  
Washington, D.C. 20005-3934

Direct Telephone Calls to:

(202) 371-2600

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor	Arya Reza Behzad
Signature of sole or first inventor	Date 9/5/02
Residence	
Poway, CA	
Citizenship	
Mailing Address	
13708 Paseo de las Cumbres, Poway, CA 92064	
Full name of second inventor	
Signature of second inventor	Date
Residence	
Citizenship	
Mailing Address	
Full name of third inventor	
Signature of third inventor	Date
Residence	
Citizenship	
Mailing Address	

(Supply similar information and signature for subsequent joint inventors, if any)

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Arya Reza Behzad

Appl. No. 09/712,410

Filed: November 13, 2000

For: **Large Dynamic Range  
Programmable Gain Attenuator**

Confirmation No.

Art Unit: 2817

Examiner: To be assigned

Atty. Docket: 1875.0980001

### **Revocation of Prior Power of Attorney and Appointment of New Attorneys of Record**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The undersigned, having express authority to represent Broadcom Corporation, the assignee of the entire right, title, and interest in the above-captioned application, by Assignment filed at the U.S. Patent and Trademark Office on even date herewith (copy enclosed), hereby revokes all powers of attorney heretofore given in the above-captioned application and appoints as his attorneys Robert Greene Sterne, Registration No. 28,912; Edward J. Kessler, Registration No. 25,688; Jorge A. Goldstein, Registration No. 29,021; Samuel L. Fox, Registration No. 30,353; David K.S. Cornwell, Registration No. 31,944; Robert W. Esmond, Registration No. 32,893; Tracy-Gene G. Durkin, Registration No. 32,831; Michele A. Cimbala, Registration No. 33,851; Michael B. Ray, Registration No. 33,997; Robert E. Sokohl, Registration No. 36,013; Eric K. Steffe, Registration No. 36,688; Michael Q. Lee, Registration No. 35,239; Steven R. Ludwig, Registration No. 36,203; John M. Covert, Registration No. 38,759; and Linda E. Alcorn, Registration No. 39,588, with full power of substitution, association, and revocation, to prosecute said application and to transact all business in the United States Patent and Trademark Office connected therewith.

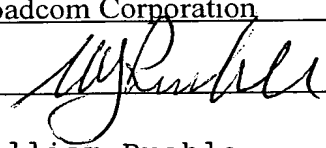
The undersigned hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send all correspondence to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
1100 New York Avenue, N.W.  
Suite 600  
Washington, D.C. 20005-3934.

Direct telephone calls to (202) 371-2600.

On behalf of Broadcom Corporation:

FOR: Broadcom Corporation  
SIGNATURE:   
BY: William Ruehle  
TITLE: Vice President & CFO  
DATE: May 22, 2001

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## Certificate Under 37 C.F.R. § 3.73(b)

Applicant/Patent Owner: Arya Reza Behzad

Application No./Patent No.: 09 712,410 Filed/Issue Date: November 13, 2000

Entitled: Large Dynamic Range Programmable Gain Attenuator

Broadcom Corporation

(Name of Assignee)

, a corporation

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest, or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☒ An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

**[NOTE:** A separate copy (*i.e.*, the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: May 22, 2001

Name: William Ruehle

Title: Vice President & CFO

Signature: 



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## ASSIGNMENT

Sole

**WHEREAS, I, ARYA REZA BEHZAD**, residing at Danville, California 94506, have invented certain new and useful improvements disclosed in an application for United States Letters Patent entitled **LARGE DYNAMIC RANGE PROGRAMMABLE GAIN ATTENUATOR**, filed **November 13, 2000**, Application No. **09/712,410**.

**AND WHEREAS BROADCOM CORPORATION**, a California corporation, having a place of business at 16215 Alton Parkway, Irvine, California 92618-3616 (hereafter, together with any successors, legal representatives or assigns thereof, called "ASSIGNEE") wants to acquire the entire right, title and interest in and to said improvements and application.

**NOW, THEREFORE**, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over to ASSIGNEE the entire right, title and interest in and to said improvements, and said application and all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon and all reissues, reexaminations and extensions thereof, and all priority rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said improvements in any foreign countries, and all patents (including all continuations, divisions, extensions, renewals, substitutes, and reissues thereof) granted for said improvements in any foreign countries; and I hereby authorize and request the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to ASSIGNEE in accordance with the terms of this Assignment;

DO NOT FORWARD  
TO ASSIGNMENT BRANCH  
NOT FOR RECORDATION

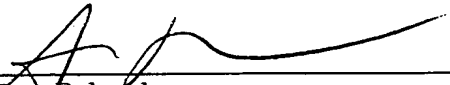
**AND I HEREBY** covenant that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

**AND I HEREBY** further covenant and agree that I will communicate to ASSIGNEE any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute and reissue applications, make all rightful oaths and generally do everything possible to aid ASSIGNEE to obtain and enforce proper patent protection for said improvements in all countries.

ASSIGNMENT

Sole

IN TESTIMONY WHEREOF, I hereunto set my hand this 23rd day of March, 2007.

  
Arya Reza Behzad

NJP/clc  
CLC PAS334277.1-\* -3/14/01 9:07 AM

DO NOT FORWARD  
TO ASSIGNMENT BRANCH  
NOT FOR RECORDATION